

# The Health Consequences of Involuntary Exposure to Tobacco Smoke

*A Report of the Surgeon General*



## Secondhand Smoke

what it means to  
**you**



# Secondhand Smoke

It hurts you.

It doesn't take much.

It doesn't take long.

The 2006 Surgeon General's report has new information about how breathing secondhand smoke hurts your health. You can find more information about this report by going to the Surgeon General's website at [www.surgeongeneral.gov](http://www.surgeongeneral.gov).

More information is also available by going to the Centers for Disease Control and Prevention (CDC) website at [www.cdc.gov/tobacco](http://www.cdc.gov/tobacco).

## **Secondhand smoke is dangerous.**

The Surgeon General of the United States, working with a team of leading health experts, studied how breathing secondhand tobacco smoke affects you.

This booklet explains what scientists have learned about the dangers of secondhand smoke. It also tells you how to protect yourself and your family.

## **What is secondhand smoke?**

When a person smokes near you, you breathe secondhand smoke. Secondhand smoke is the combination of smoke from the burning end of the cigarette and the smoke breathed out by smokers. When you breathe secondhand smoke, it is like you are smoking.

Whether you are young or old, healthy or sick, secondhand smoke is dangerous.



## What we now know:

- There is no safe amount of secondhand smoke. Breathing even a little secondhand smoke can be dangerous.
- Breathing secondhand smoke is a known cause of sudden infant death syndrome (SIDS). Children are also more likely to have lung problems, ear infections, and severe asthma from being around smoke.
- Secondhand smoke causes heart disease and lung cancer.
- Separate “no smoking” sections DO NOT protect you from secondhand smoke. Neither does filtering the air or opening a window.
- Many states and communities have passed laws making workplaces, public places, restaurants, and bars smoke-free. But millions of children and adults still breathe secondhand smoke in their homes, cars, workplaces, and in public places.



## No amount of secondhand smoke is safe.

When you are around a person who is smoking, you inhale the same dangerous chemicals as he or she does. Breathing secondhand smoke can make you sick. Some of the diseases that secondhand smoke causes can kill you.

Protect yourself: do not breathe secondhand smoke. But completely avoiding secondhand smoke is very hard to do. Most of us breathe it whether we know it or not. You can breathe secondhand smoke in restaurants, around the doorways of buildings, and at work. When someone smokes inside a home, everyone inside breathes secondhand smoke. Some children even breathe smoke in day care.

There is no safe amount of secondhand smoke. Children, pregnant women, older people, and people with heart or breathing problems should be especially careful. Even being around secondhand smoke for a short time can hurt your health. Some effects are temporary. But others are permanent.



## WHAT CAN YOU DO?

### Make your environment smoke-free.

- *Make your home and car smoke-free.*
- *Visit smoke-free restaurants and public places.*
- *Ask people not to smoke around you and your children.*



## Secondhand smoke contains poisons.

The chemicals found in secondhand smoke hurt your health and many are known to cause cancer. You breathe in thousands of chemicals when you are around someone who is smoking.

### WHAT THE SCIENCE SAYS

#### How do scientists measure exposure to secondhand smoke?

Researchers measure

- how many people are smoking
- how many cigarettes they smoke
- time spent in the room
- levels of nicotine in the air, and
- levels of nicotine by-products in the body



# Secondhand Smoke

is toxic

## Cancer Causing Chemicals

All are extremely toxic

## Toxic Metals

Can cause cancer  
Can cause death  
Can damage the brain and kidneys

Secondhand smoke has more than 4,000 chemicals.

Many of these chemicals are toxic and cause cancer.

You breathe in these chemicals when you are around someone who is smoking.



**Formaldehyde**  
Used to embalm dead bodies



**Chromium**  
Used to make steel



**Arsenic**  
Used in pesticides



**Lead**  
Once used in paint



**Cadmium**  
Used in making batteries



**Toluene**  
Found in paint thinners



**Ammonia**  
Used in household cleaners



**Butane**  
Used in lighter fluid



**Hydrogen Cyanide**  
Used in chemical weapons



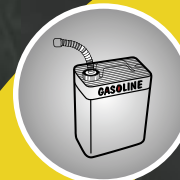
**Carbon Monoxide**  
Found in car exhaust



**Vinyl Chloride**  
Used to make pipes



**Polonium-210**  
Radioactive and very toxic



**Benzene**  
Found in gasoline







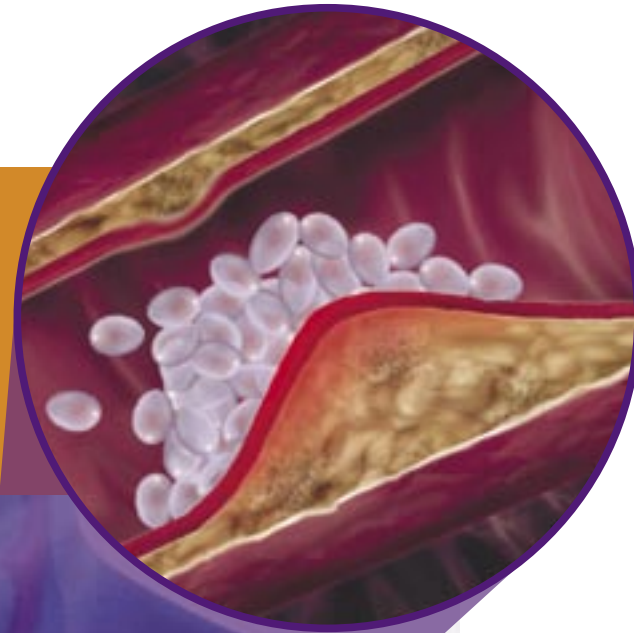




People who have heart disease should be very careful not to go where they will be around secondhand smoke.

The bottom line is that breathing secondhand smoke makes it more likely that you will get heart disease, have a heart attack, and die early.

*Even a short time in a smoky room causes your blood platelets to stick together. Secondhand smoke also damages the lining of your blood vessels. In your heart, these bad changes can cause a deadly heart attack.*



## **Secondhand smoke hurts your lungs.**

Secondhand smoke includes many chemicals that are dangerous for your lungs. Secondhand smoke is especially dangerous for young children and adults with heart and lung disease.

## **Secondhand smoke causes lung cancer.**

Secondhand tobacco smoke contains the same cancer-causing chemicals that smokers inhale.

Secondhand smoke causes lung cancer in adults who don't smoke. Breathing in secondhand smoke at home or work increases your chances of getting lung cancer by 20 percent to 30 percent.



# WHAT CAN HEALTH CARE EXPERTS DO?

- Ask patients if they smoke and if they are around secondhand smoke.
- Advise patients who smoke to stop, and help them quit.
- Advise patients who smoke not to smoke around others.
- Advise nonsmokers to protect themselves by avoiding all secondhand smoke.
- Remind parents to protect their children from secondhand smoke.
- Discuss the added dangers of secondhand smoke for adults who have heart disease or asthma.
- Offer special warnings to parents when treating children with respiratory infections, asthma, or ear disease.

# WHAT CAN EMPLOYERS DO?

## Protect your workers.

Secondhand smoke is harmful for all workers. Restaurant and bar workers breathe more secondhand smoke than other workers and have higher rates of lung cancer.

- Make sure your employees do not breathe secondhand smoke at work.
- Make all indoor places smoke-free.
- Don't allow smoking near doorways and entrances.
- Offer programs to help employees quit smoking.

## Secondhand smoke causes other breathing problems.

Secondhand smoke affects how well your lungs work, especially if you already have asthma or other breathing problems. Being around smoke makes you more congested and cough more.

Secondhand smoke also irritates your skin, eyes, nose, and throat. If you have allergies or a history of breathing problems, secondhand smoke can make you even sicker.

## WARNING

You should especially speak to your doctor or healthcare provider about the dangers of secondhand smoke if:

- You have breathing or heart problems
- You are pregnant
- You are concerned about your children's health

## Secondhand smoke may cause disease in other parts of your body.

We know that smoking causes many forms of cancer. Scientists believe even a little tobacco smoke is dangerous. Scientists also believe secondhand smoke may cause other diseases throughout your body. They are doing studies on possible links to stroke, breast cancer, nasal sinus cancer, and chronic lung problems in children and adults.



Secondhand smoke may cause disease in other parts of your body.

There's no such thing as a

**NO SMOKING**

section

No amount of secondhand smoke is safe.

Here are some unexpected ways you may breathe secondhand smoke every day:

- Sitting in the "no smoking" section, even if it doesn't smell smoky
- Riding in a car while someone else is smoking, even if a window is open
- Being in a house where people are smoking, even if you're in a another room
- Working in any restaurant, warehouse, or building that allows smoking inside, even if there is a filter or ventilation system



# Acknowledgments

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## About the Surgeon General's Report

The Surgeon General is the nation's highest-ranking health officer. The President appoints the Surgeon General to help promote and protect the health of all Americans.

The Surgeon General gives Americans the best scientific information available on how to improve their health and reduce their risk of illness and injury.

*The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General* was prepared by many of the country's leading scientists and public health experts. The full report is more than 600 pages long. It took more than 4 years to complete. It is written for a scientific audience. However, Surgeon General Richard H. Carmona believes the findings are very important to everyone.

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## For more information

For more information on secondhand smoke, talk to your doctor, nurse, pharmacist, or other healthcare professional.

More information about the Surgeon General's report is available on the Surgeon General's website at

**[www.surgeongeneral.gov](http://www.surgeongeneral.gov)**

More facts and advice are available from  
Centers for Disease Control and Prevention

**[www.cdc.gov/tobacco](http://www.cdc.gov/tobacco)**

Toll free: **1-800-CDC-INFO** (1-800-232-4636)

In English, en Español

24 hours/day, 7 days/week

Text telephone for hearing impaired: **1-888-232-6348**

Other helpful information is available at [www.smokefree.gov](http://www.smokefree.gov).

To access a telephone quitline serving your area, call  
**1-800-QUIT-NOW** (1-800-784-8669).

To download copies of this booklet or the full Surgeon General's report, *The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General*, go to

**[www.cdc.gov/tobacco](http://www.cdc.gov/tobacco)**.

To order single copies of these documents, call toll free

**1-800-CDC-INFO**.